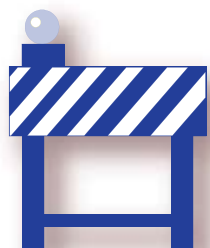


**Hidden Lake Pump Station
& Sewer Improvement Project**

**CONSTRUCTION
MOVES FORWARD!
Winter 2006/2007**



Creating Resources from Wastewater

More information?

- Call the 24-hour construction hotline at 206-205-5968. A staff person will be paged and will respond promptly.
- Contact Jennifer Kauffman, King County Wastewater Treatment Division, at 206-263-6029 or jennifer.kauffman@metrokc.gov. Ask to be added to the project mailing list or e-mail list.
- Visit the project Web site at <http://dnr.metrokc.gov/wtd/projects/hiddenlake.htm>

Alternative Formats
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King County
Department of
Natural Resources and Parks
**Wastewater Treatment
Division**

HIDDEN LAKE

Sewer Improvement Project

NEWSLETTER

WINTER 2006/2007

**Collaboration
with Ronald
Wastewater
District
improves
sewer service**



The Ronald Wastewater District (Ronald) collects wastewater from homes and businesses in Shoreline and delivers it to King County's regional conveyance and treatment system.

Ronald Wastewater District has operated for the last 40 years. For the Hidden Lake Sewer Improvement Project, King County and Ronald worked closely to design local and regional sewer connections that improved the capacity and reliability of both systems.

As a result, the county's contractor is replacing some of Ronald's manholes and sewer pipes while working on the county's system. For example, the county's new 500,000 gallon wastewater storage pipe in Boeing Creek Park will replace Ronald's existing 24-inch sewer line that runs through the park. The new storage pipe will help prevent overflows to the Puget Sound during large storms.

During construction of the county's new Boeing Creek Trunk Sewer, the county's contractor will also construct new manholes and sewers for Ronald in several locations.

By project completion in 2008, the partnership between King County and Ronald Wastewater District will improve overall sewer service to residents in Richmond Beach and Innis Arden.

For more information on Ronald Wastewater District:

- Visit the Web site at www.ronaldwastewater.org
- Or contact Michael Derrick, General Manager, at 206-546-2494

CONSTRUCTION MOVES FORWARD!

King County's Hidden Lake Sewer Improvement Project will increase sewer system reliability and protect public health and the environment by reducing overflows to Puget Sound. The county's contractor, Frank Coluccio Construction Company (FCCC) continues to make progress on all three projects, shown on the map on page 3. Construction is expected to continue until early 2009.

**Boeing Creek Trunk Sewer
Replacement underway in
Richmond Beach**

Crews installing new sewer pipe and manholes for the Boeing Creek Trunk Sewer have progressed from the Richmond Beach Pump Station south to the intersection of Northwest 196th Street and 23rd Avenue Northwest. A temporary patch has been placed on the road. Crews will pave the final full-width overlay and widened asphalt shoulder when the weather warms up.



Final paving will occur by the summer.

Next, crews will continue south on 23rd Avenue Northwest toward Richmond Beach Saltwater Park. Construction between Northwest 196th Street and the park will require full street closures during work hours. Local and emergency access will be maintained. Work will be completed in segments, so fewer blocks will be closed at once. The streets will be opened to through traffic when construction is not taking place. Pedestrians, drivers and bicyclists should use extra caution and watch for construction signs, vehicles and activity. Flaggers will assist in directing traffic.

(Continued on page four)



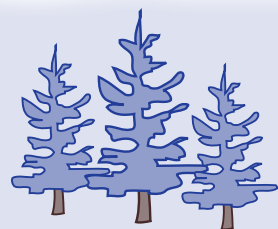
New sewers installed in trench.

(Continued from page one)

Richmond Beach Sewer Replacement

The contractor has also begun work in Richmond Beach Saltwater Park. Part of the park has been fenced off for public safety, but the park and trails will remain open. The contractor has constructed an access shaft to allow microtunneling of a segment of the sewer between two private homes. County staff will work with park users and neighbors to provide information and minimize impacts. Work in Richmond Beach should be completed by summer 2007 and will then proceed to Innis Arden.





Trees in Boeing Creek Park are protected during construction

Any construction project—even a home addition—can affect trees, shrubs, and other plants. Special care must be taken to prevent damage to trees, especially the root zone that extends some distance from the trunk.

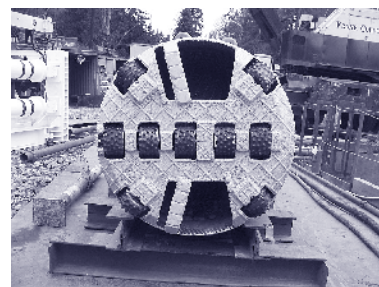
Project designers developed plans for the wastewater storage pipe in Boeing Creek Park with trees in mind. Engineers established a location and shape of the pipe that would avoid as many trees as possible. During construction, tree protection fences and signs were installed to keep equipment and materials away from the trees. A certified arborist advised the contractor on limb tying and root protection of trees near the construction area.

King County provided funding to the City of Shoreline to replace trees that were located in the path of construction. Some downed trees were relocated as habitat logs by the contractor under direction of the City of Shoreline Parks Department.

The Parks Department relocated a number of young trees planted by residents in Boeing Creek Park. These trees now live in a restoration area in neighboring Shoreview Park.

Construction near Boeing Creek Park complete by late 2007

Boeing Creek Park remains open to the public during construction. Crews have completed installation of a 12-foot diameter underground wastewater storage pipe. The 500,000 gallon storage pipe is about 640 feet long, and is made up of 67 concrete pipe sections. Each section weighs 30 tons and has a 12-inch thick wall. The new pipe will limit overflows to Puget Sound.



Microtunneling machine

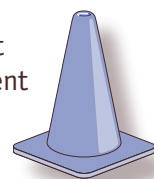


Tunneling machine enters flow control structure in park

Crews are now constructing the underground flow and odor control structures associated with the storage pipe. The contractor increased the capacity of the city's storm water detention pond and installed erosion control materials for the rainy season. In 2007, as part of a cooperative effort with the City of Shoreline, crews will add additional capacity to the pond. At the end of construction, the county will clean up the park and plant a grass and wildflower mix. Completion of the work by late 2007 will allow the City of Shoreline to begin park improvements in 2008 with funds provided by the county.

The crews have also constructed new sewers under the streets near the park using a microtunneling machine (see photos). In spring 2007, crews will tunnel a new sewer line down 10th Avenue Northwest toward the Hidden Lake Pump Station. Work will be completed in the spring and summer to minimize traffic conflicts with Shoreline Community College. Closure of 10th Avenue Northwest to through traffic will be required for about four months. Local and emergency access will be maintained. The contractor will also have to open cut a smaller, shallower sewer in Northwest 175th Street, which will require single lane closures.

During the winter, typical work hours in Boeing Creek Park will be 7 a.m. to 8 or 8:30 p.m. M-F and Saturday from 9 a.m. – 6 p.m. Park users should obey trail detour signs and keep pets on leashes. People should expect temporary parking and traffic impacts in the area, including intermittent lane closures and detours. Flaggers will assist with directing traffic.



Hidden Lake Pump Station Replacement

Crews are currently working on the walls of the new Hidden Lake Pump Station. Once the building is completed in 2007, most work will move inside for about a year. The pump station will take about two and one-half years to build, due to the complexity of the equipment inside, the need to switch flows from the old to new station, and eventual demolition of the existing building. The new station is designed to fit in the neighborhood and includes native plant landscaping.

Construction underway: Hidden Lake Sewer Improvement Project

1 Replace part of the Boeing Creek Trunk Sewer

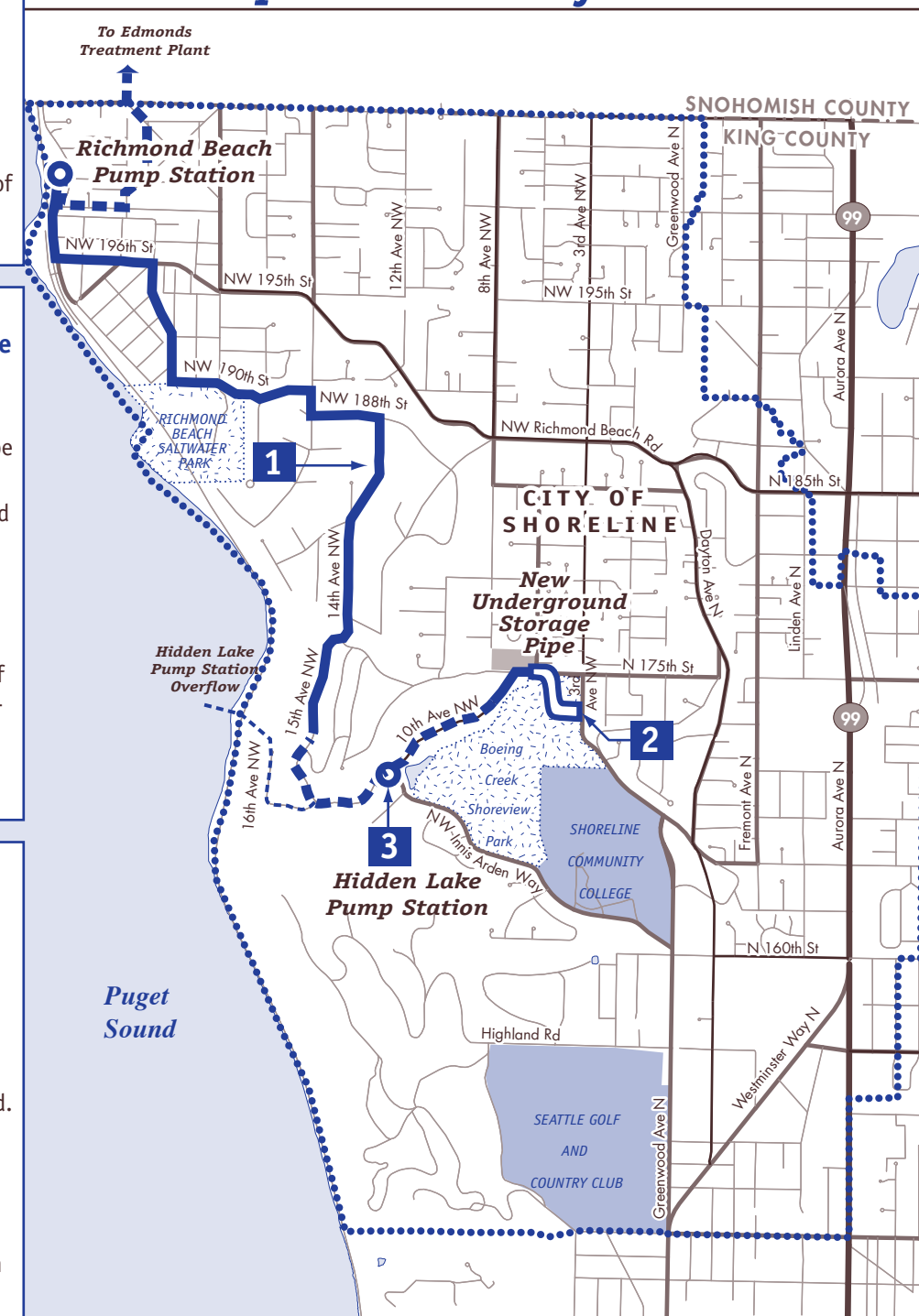
- Complete construction by late 2008.
- Use current sewer route.
- Replace about 12,000 feet of sewer, including corroded pipe.
- Replace about 5,000 feet of water mains for Seattle Public Utilities.

2 Build a new underground storage pipe

- Complete construction by late 2007.
- Build a 500,000-gallon pipe in Boeing Creek Park.
- Build underground flow and odor control structures.
- Coordinate with the city's stormwater and park improvement projects.
- Replace about 1,000 feet of pipe in the street by micro-tunneling and trenching.
- Restore street after construction ends.

3 Replace Hidden Lake Pump Station

- Complete construction by early 2009.
- Use the existing site.
- Increase the pumping capacity from 4.3 million gallons per day to 6.8 mgd.
- Design building and landscape to fit the community.
- Select equipment to optimize system operation and reduce odors and noise.



- # Project component number
- Richmond Beach Wastewater Service Area
- Overflow to Puget Sound
- Underground storage pipe

- Existing sewer line
- Boeing Creek Trunk Sewer Line Replacement Area
- Road
- Water body

Completed activity

